

DOCUMENT RESUME

ED 351 505

CE 062 274

TITLE Tech Prep: A National Survey. Vocational Education Research.
INSTITUTION Delgado Community Coll., New Orleans, LA.
SPONS AGENCY Louisiana State Dept. of Education, Baton Rouge. Div. of Vocational Education.
PUB DATE 91
NOTE 101p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Articulation (Education); Educational Resources; High Schools; Information Networks; *Models; *Program Development; *State Programs; *Technical Education; Technical Institutes; *Two Year Colleges; Vocational Schools
IDENTIFIERS *Tech Prep

ABSTRACT

Prompted by new funding provided through the reauthorization of the Carl D. Perkins Vocational Education Act, a study examined the status of program development of tech prep initiatives in the technical institutes and community colleges of the United States. Using mailing lists of members of the American Vocational Association and the American Association of Junior and Community Colleges, a one-page questionnaire was mailed to each of the institutions seeking basic programmatic information; more than 500 schools responded. In addition to school responses, some questionnaires were forwarded to other agencies and, in a number of cases, state departments of education responded. The survey results indicate that most two-year schools in the United States are just beginning their tech prep programs. A few states have developed programs over a number of years, but only at specific locations. Most states were just getting started. (Extensive appendixes, which make up most of this document, include samples of the most helpful responses from community and technical colleges in 26 states, sample programs provided by some of the schools, a list of national curriculum centers and state contacts for tech prep programs, information on the National Network for Curriculum Coordination in Vocational and Technical Education, a bibliography of 46 references on tech prep, and an index by program area.) (Author/KC)

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Vocational Education Research

TECH PREP: A National Survey

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Delgado Community College

1991

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PROJECT TITLE
TECH PREP: A National Survey

PROJECT DIRECTORS

Dr. Jerry Pinsel
Mr. Anthony Molina

Funded by
The State of Louisiana
Department of Education
Office of Vocational Education

Delgado Community College
Summer 1991

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FOREWORD

In every society, education is the means to an end: citizens must acquire a basic knowledge that will enable them to survive. In a democratic society, education becomes the means by which the individuals have the opportunity to develop their personalities, their talents, their dreams.

Developing competent citizens who can be involved effectively in the affairs of this state and our nation is critically important to Louisiana's educators as we approach the 21st century. The young people in Louisiana's schools today must be fully prepared to accept tomorrow's leadership roles with the knowledge, skills, and values necessary to sustain a democratic society against the many complex problems that will face them, this nation, and the world. They must be able to acquire, analyze, and evaluate vast amounts of information, synthesize it into knowledge, and refine it into the wisdom needed by competent citizens. Through the educational processes, they must be guided in the developing of creative and critical thinking processes to the extent they are capable of standing confidently on their own feet, of making clear and effective judgements, and of transferring acquired knowledge and skills to new tasks and skills demanded by everchanging society.

This research project, "Tech Prep: A National Survey," was produced as a result of a project funded by the Louisiana State Department of Education to Delgado Community College. This study represents an effort to survey the current status of Tech Prep programs throughout the United States by means of a questionnaire mailed to selected technical institutes and community colleges throughout the nation.

The study was undertaken for the express purpose of aiding Louisiana schools and school systems which will be participating in future Tech-Prep efforts as outlined by the legislation reauthorizing the Carl D. Perkins funds for 1992. It provides data reflecting the current status of Tech Prep program development throughout the country.

We believe that the results of this study will make a major contribution to the future Tech Prep programs in Louisiana.

We believe that this survey will make a major contribution to the improvement of vocational education instruction. Its purpose is to encourage students at the secondary level to prepare for work through continued education leading toward a two-year certificate or associate degree.

Wilmer S. Cody
State Superintendent of Education

ACKNOWLEDGEMENTS

This publication represents the cooperative efforts of personnel from Delgado Community College, Louisiana State University, and the State Office of Vocational Education. Special recognition goes to Dr. Jerry Pinsel who served as the Project Director and Tony Molina who served as the Tech Prep project director. Special thanks goes to Dr. Florent Hardy who served as the project's editor for both his expertise and unfailing support. Also, special commendation goes to the members of the support staff who worked hard to make such a massive undertaking a reality.

F. Travis Lavigne, Jr.
Assistant Superintendent
Office of Vocational Education

TECH-PREP: A National Survey

A Research Project
Funded by the
Louisiana Board of Elementary and
Secondary Education

and the

Louisiana State Department of Education
Office of Vocational Education/Coordinating
Unit Bureau

through

Carl D. Perkins Act 1984 Funds

at

Delgado Community College

Dr. James A. Caillier
President
New Orleans, Louisiana
Summer 1991

Dr. Wilmer S. Cody
State Superintendent of Education

Printed by the Delgado Community College Press, Summer 1991

Mr. F. Travis Lavigne, Jr., Assistant Superintendent for Vocational Education

Dr. Florent Hardy, Jr., Bureau Director, Coordinating Unit

Dr. Jerry Pinsel, Research Project Director

Mr. Anthony Molina, Tech-Prep Project Director

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ABSTRACT

The study sought to examine the status of program development related to Tech Prep initiatives in the technical institutes and community colleges throughout the United States. This study was prompted by the changes incorporated in the reauthorization of the Carl D. Perkins fund, by the United States Congress, which define and provide new funding for such initiatives. Using membership mailing lists provided by the American Vocational Association and the American Association of Junior and Community Colleges, a one-page questionnaire was mailed to each of the institutions seeking basic programmatic information. Over five hundred schools responded.

The survey results indicate that the vast majority of two-year schools in the United States are just beginning their Tech Prep programs. Many are still in their planning stages and will not implement a pilot Tech Prep program until at least Fall 1991. A few states (North Carolina, Oregon, etc.) appear to have programs which have been developed over a number of years; but, even in those states, the development appears to have occurred at certain specific locations.

A number of school officials responded that, while their particular school had entered into various articulation agreements with other institutions, those endeavors should not be confused with "pure Tech Prep" initiatives. The most frequent survey responses were, "Just getting started" and "Awaiting status report on our funding application."

In addition to school responses, some questionnaires were forwarded to other agencies and, in a number of cases, state departments of education responded. In an effort to make this study a practical, working document, the most useful responses were selected for inclusion in the appendices as were copies of the most succinctly useful enclosures.

BACKGROUND

The "tech-prep" concept is associated with a long history. In 1990, the 101st Congress renamed the Carl D. Perkins Act the Perkins Vocational and Applied Technology Education Act and amended it to include The Tech Prep Education Act.

As defined by law, tech prep is an educational program which coordinates secondary and postsecondary education. By following a specific two-year series of high school courses and a specific two-year series of postsecondary courses, students receive a tech prep associate degree or certificate and are placed in employment. Such training is designed to train students in at least one field from among: agriculture, applied science, business, engineering, health, industrial arts, mechanical arts, or practical arts.

Technological advances and global economic competition demand increased levels of skilled technical education preparation on the part of youths entering the workforce...; and, systematics technical education articulation agreements between secondary and postsecondary educational institutions are necessary for providing youth with skills...and intense technical preparation necessary for finding a position in a changing workplace. (Tech Prep Act, 1990: 38-39).

The Tech Prep Act represents a renewed effort to create technical preparation for the future workforce. In addition, the development of such curricula can strengthen relationships between secondary districts, postsecondary schools, and employers. In addition, it could increase both student retention rates and successful entry rates at the postsecondary level.

It is believed that a strong educational system leads to increased economic health of a region or state. In addition, it is believed that vocational education quality leads to high labor market productivity. This can give business a competitive edge (Bishop, 1982; Budke, 1988).

Will the increase of high technology industries increase or decrease employee/job skill requirements? Should schools increase the availability of highly specialized technical job skill training? Should schools turn their attention to the development of broadly applicable basic and higher order skills? These are critical questions.

HISTORICAL DEVELOPMENT

The Manpower Development and Training Act of 1962 and the Vocational Education Act of 1963 represented the first major attempts to establish tech prep programs. The federal legislation gave an increasingly prominent role to vocational education in the achievement of national labor policies. The legislation placed a priority on the expansion and refinement of occupational information.

In response, in 1968, the Oregon State Board of Education and State Department of Employment formed two task forces to establish a plan for developing occupational education in the state's high schools and community colleges. The Oregon plan specified course sequences which were designed to provide either:

- (1) entry-level job skills for those graduating from high school or
- (2) preparation for advanced placement at a college.

Dale Parnell, immediate past President of the American Association of Community and Junior Colleges, then Superintendent of Public Instruction with the Oregon State Board of Education, coordinated the curriculum development activities as head of The Community College/High School Articulation Task Force II. The activities of the committee included:

- (a) identifying the elements of effective articulation between high schools and community colleges
- (b) supporting a "cluster approach" to occupational program planning,
- (c) promoting the exploration of occupations in grades seven through ten, and
- (d) requiring the overall program to include guidance and counseling services in all grades.

Dale Parnell discusses these curriculum development, in detail in his book, *THE NEGLECTED MAJORITY*.

The Education Amendments of 1972 established a 1202 Commission. This effort required the establishment of state-level commissions which would be responsible for comprehensive planning of postsecondary education including community colleges and vocational education.

The National Institute of Education, in response, advocated an educational continuum spanning vocational technical and academic education (Bender, 1973). NIE supported a "career education concept" in the articulation of secondary and postsecondary occupational education programs.

Several states responded. In Michigan, guidelines for articulation plans were published, state community college districts were reorganized, two demonstration projects were supported, and Public Act Number 97 of 1974 was approved. In addition, articulation agreements between community colleges and four-year institutions were formulated.

North Carolina also responded. Funded by the State Department of Education, between 1974 and 1978, eight community colleges and eleven school systems participated. Instructional Guides were developed by the high school and technical institute instructors. Articulation Guidelines were developed cooperatively.

In all these states, emphasis was placed upon student outcomes/proficiency rather than the specific means of achievements (i.e. textbook, etc.). Taken collectively, these were some of the earliest "tech prep" efforts.

During the 1980s other states followed and, in 1984, the National Commission of Secondary Vocational Education issued *THE UNFINISHED AGENDA: THE ROLE OF VOCATIONAL EDUCATION IN THE HIGH SCHOOL* documenting the need for reform. The report argued that, "eighty percent of the jobs in America do not require a college degree, and most students will not obtain one" and proposed that a "smooth transition is fostered through articulation efforts such as a coordinated tech prep curriculum."

Rather than waiting for federal initiatives, the Commission suggested that development come from state leadership. Dale Parnell assumed a major leadership role in these efforts and in the drive for federal-level prioritization for the tech prep concept.

In 1984, Parnell, and the American Association of Junior and Community Colleges specified the future direction for tech prep efforts:

Technical programs prepare students for entry-level jobs as technicians. The technician usually works in close cooperation with and under the direct supervision of a professionally trained individual. Students enrolled in the technical programs take general education courses in the areas of English, mathematics, science, and social science. Technical programs lead to an Associate in Applied Science degree and are designed primarily for entrance into employment, not for college transfer (AACJC).

Within tech prep:

The high school portion of the career program will be intentionally preparatory in nature. Built around career clusters and technical systems' study such as the tech-prep approach will help students develop broad-based competence in a career field and void the pitfalls of more short term and narrowly delineated job training (Parnell).

During the development of tech prep efforts, from the mid-eighties to the present, most articulated programs have not involved structured sequencing from grades eleven through fourteen. Most involved joint programming aimed at the elimination of course duplication and/or advanced placement.

The USDE Office of Vocational and Adult Education collected program data from seventy-two sites in twenty-nine states (Long, 1986) and published a guide for successful articulation. In addition to this "how to" guidebook, another is available from the Illinois State Board of Education (1987).

McKinely (1988) collected data from one hundred thirty-four (134) postsecondary and two hundred forty secondary institutions with articulation programs in operation for at least three years and concluded that few tech prep programs are articulated between secondary and postsecondary institutions. While a number of investigators have found that a significant number of institutions allow the application of some high school work toward a postsecondary degree, few engage in formal 2+2 articulation programs (18%).

For further information regarding the background/historical development of the tech prep concept contact:

National Center for Research in Vocation Education
3650 Tolman Hall
University of California at Berkeley
Berkeley, California 94720

SUMMARY

During the 1990-91 Academic Year, one-page surveys were mailed to selected members of the American Vocational Association and the American Association of Community and Junior Colleges. Nearly five hundred responses were received, by the project office, from the various institutions. Of those responses, well over half indicated that the Tech Prep initiatives were new to their geographic areas and that they were at one of five stages: (1) contemplating; (2) just forming a consortium, (3) planning, (4) awaiting word with regard to the funding of proposals, or (5) piloting.

Of those institutions which had moved beyond these stages, a number enclosed documents which may be of great interest to others involved in any stage of implementing a Tech Prep program. Because of the value these enclosures may be to others, note has been made of the enclosures and a few succinct program outlines and diagrams have been included as part of this document.

While institutions in certain states have clearly taken leadership roles in the development of the Tech Prep concept, clearly the involvement of the majority of the respondents have been driven by the changes in statute with regard to the reauthorization of the Carl D. Perkins funds at the federal level. Other institutions have, for years, entered into both formal and informal articulation agreements, of various types, and those responses were noted as well.

In reviewing the hundreds of responses from various institutions throughout the United States, several things became apparent. First, it seemed more important, at this point in the development of Tech Prep models, to summarize the most useful responses, along with the contact information, for a wider distribution than was originally anticipated. Clearly a communication network would help to strengthen most of the Tech Prep models currently under consideration. In addition, and with much thanks to Carolyn Domsie, with the National Center for Research in Vocational Education at the University of California, Berkley, the inclusion of other information seemed critical. Specifically, it seemed useful to include some background information with regard to the Tech Prep concept; NNCCVTE contact information; and NCRVE's Tech Prep bibliographic updates to date.

The original intent of this document was to serve as a practical reference guide for program directors in Louisiana who were contemplating the implementation of a Tech Prep program. After receiving hundreds of requests from respondents to the survey requesting copies of the results, it is hoped that the document will serve as a practical reference guide for all of those at the contemplating, planning, and piloting stages of Tech Prep.

APPENDIX A
MOST HELPFUL RESPONSES

ALABAMA

NorthWest Alabama Community College
P.O. Drawer 9
Hamilton, AL 35570

2

1. How large is your Tech-Prep consortium?
 - A. 6-9 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Community College
 - B. School Systems (all in service area)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Northeast Alabama Community College	2000
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
 - C. Industrial Arts/Trades

Other documents available: Alabama State Board of Education Request for Proposals/Tech-Prep Education Planning

CALIFORNIA

Las Positas College
South County Community College District
3033 Collier Canyon Road
Livermore, CA 94550-9797

3

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems
 - B. Community Colleges
 - C. Regional Opportunity Centers
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
 - B. Regional Opportunity Centers
4. What are the approximate enrollments of the Tech-Prep consortium participants?

N.A.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Industrial Arts/Trades
6. Briefly describe the manner in which the integration of academics is being addressed.
 - A. This has not yet been addressed.

Note: The college has not developed a Tech-Prep program. The college is active in 2 + 2 programs with local high schools, Regional Opportunity Centers, and Regional Opportunity Programs.

Modesto Junior College
435 College Avenue
Modesto, CA 95350
ATTN: Arnold Blank

1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (33%)
 - B. Community Colleges (33%)
 - C. Vocational Schools (33%)
3. Organizational leadership is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
 - C. Vocational Schools
4. What are the approximate enrollments of the Tech-Prep consortium participants?

N.A.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. All programs offered.
6. Briefly describe the manner in which the integration of academics is being addressed?
 - A. We are just now organizing councils. We do have several 2 + 2 programs which are operating very successfully (Graphic Arts, Criminal Justice, Automotive).

CALIFORNIA

College of the Canyons
Santa Clarita Community College District
26455 North Rockwell Canyon Road
Valencia, CA 91355
(805)259-7800
ATTN: Helen C. Lusk

5

1. How large is your Tech-Prep consortium?

- A. 16-20 members

We call it an "Articulation Council." From this group there is a Steering Committee charged with developing protocols for Tech-Prep.

2. Which entities hold membership in your Tech-Prep consortium?

- A. 5 Local School Systems
B. 9 Community Colleges
C. 4 Others: Industry representatives

3. Organizational leadership for the consortium is derived primarily from which members?

- A. Local School Systems
B. Community Colleges
C. Others: Industry

4. What are the approximate enrollment(s) of the Tech-Prep consortium participants?

Not able to give at this time.

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?

We are not this far yet. However, Welding, Health Occupations, and Drafting will be programs to start with Tech-Prep.

6. Briefly describe, or attach appropriate document, the manner in which the integration of academics is being addressed.

At this point the state guidelines have not been developed or initiated. October 1991 we will be told our responsibilities and where the six regional centers will be ready to provide inservice for the colleges.

COLORADO

Arapahoe Community College
2500 West College Drive
P.O. Box 9002
Littleton, CO 80160-9002
(303) 794-1550
ATTN: Ron Rose

6

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (33%)
 - B. Community College (33%)
 - C. Vocational School (33%)
3. Organizational leadership for the consortium is derived primarily from which members?

It is a joint effort with equal participation by all.
4. What are the approximate enrollment(s) of the Tech-Prep consortium participants?

None at this time.
5. What occupational skill areas are being addressed by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Arapahoe Community College is not currently involved in a tech-prep consortium. We are part of a proposal under consideration by the Colorado Community College and Occupational Education System Board to develop an agreement with a local school district, (Cherry Creek School District), and the Area Vocational School, (Arapahoe-Douglas County Area Vocational School).

The emphasis is to provide a joint effort for the Aviation and the Principles of Technology program. This effort will lead to an Associate Degree in Management or a certificate in Travel and Tourism at the post-secondary level. It is intended to be an exploratory step toward alternative methods of delivering vocational education.

The program will consist of three aviation career components: pilot ground training, flight attendant training, and travel/tourism training. While students will be following a program of study that will prepare them for specific careers, this approach will blend appropriate academic courses with knowledge in a particular aviation field.

Some of the areas addressed by the proposal are:

- *Distance learning through satellite communication originating at the community college.
- *A career awareness program for high school students with emphasis on non-traditional careers.
- *Providing an avenue for articulation with Arapahoe Community College in order to provide an avenue for post secondary education including potential transfer to four-year programs.

State of Connecticut
 Board of Governors for Higher Education
 Board of Trustees for State Technical Colleges
 Thames Valley State Technical College
 574 New London Tpke.
 Norwich, Connecticut 06360

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Vocational Schools (50%)
 - B. State Technical Colleges (50%)
3. Organizational leadership for the consortium is derived primarily from which member(s)?
 - A. State Technical Colleges
4. What are the approximate enrollment(s) of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Norwich Regional Technical High School	10
Ella Grasso Regional Technical High School	8
Windham Regional Technical High School	Fall 1991 Start
Willis Regional Technical High School	Fall 1991 Start

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Technical college professors have evaluated high school delivery of instruction. Department chairs monitor use of course outlines/syllabi and textbooks. College credit is given for ten hours.

Delaware Consortium on Technical Preparation Programs
DTCC-ITD
1898 North DuPont Hwy.
Dover, DE 19901
(302) 739-6164
ATTN: Dr. James R. Campbell, Executive Director
(Also available as consultant.)

1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (20%)
 - B. Community College(s) (10%)
 - C. Vocational School(s) (30%)
 - D. Others: DPI/DACCVE/4 year colleges (40%)
3. Organizational leadership for the consortium is derived primarily from which member(s)?
 - A. Vocational Schools

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Local	52,000 Secondary and Primary
Vocational	13,000
Community College	12,000
4 year Colleges	2,000

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts/Trades
 - E. Other: Criminal Justices
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Materials enclosed.
Quarterly Newsletter enclosed.

FLORIDA

10

Florida Department of Education
The Florida Education Center
Room 1114
Tallahassee, FL 32399
(904)448-8961
ATTN: Robert S. Howell

Florida is implementing a number of programs related to vocational education. A short paper entitled "Rebuilding Vocational Technical Education" gives one an understanding of how the pieces fit together.

Other enclosures include: BLUEPRINT FOR CAREER PREPARATION, TECHNOLOGY EDUCATION: THE NEW BASIC, BLUEPRINT SCHOOLS, Centers of Electronic Emphasis, Centers of Automotive Emphasis and Autotronics, Agricultural Enhancement On-Site Evaluation Report, Health Occupations Core Curriculum, and Tech-Prep RFP.

ILLINOIS

11

Illinois State Board of Education
100 North First Street
Springfield, IL 62777-0001
ATTN: Peggy Pool

There are seventeen funded planning projects across the state. RFP enclosed. These include:

Med Prep: An Experiment in Lifelong Learning
Career Development System/South Suburban College
151st and Broadway
Harvey, IL 60426
ATTN: Dean Wertz or Doug Tweeten
(708) 210-2961 or (708) 596-2000-Ext 228

Manufacturing Tech Prep
City College of Chicago/Chicago Public Schools
226 West Jackson Boulevard
Chicago, IL 60606
ATTN: Sharon Wheeler
(312) 368-8839

Tech Prep Planning
Danville Area Community College/Vermilion County EFE System
2000 East Main Street
Danville, IL 61832
ATTN: David Kietzman or Jane Brown
(217) 443-1811

Advanced Technology Tech Prep Partnership
Elgin Community College/Northern Kane County Regional Vocational System
1700 Spartan Drive
Elgin, IL 60123
ATTN: Don Kinzy and Lloyd Cundiff
(708) 888-7373

Tech Prep
Franklin County Regional Delivery System/Rend Lake College
Rend Lake Area Regional Delivery System
202 West Main Street
Benton, IL 62812
ATTN: Harold Hood and Betty Musgrave
(618) 438-9711

Tech Prep for Central Illinois
Illinois Central College/Peoria Educational Regional for Employment and Career Training/Tazewell
County Area Education for Employment Regional System/Central Illinois Vocational Education Co-op
One College Drive
East Peoria, IL 61636
ATTN: Doris Kling and Jorja Hanna
(309) 694-5416

ILLINOIS

Illinois State Board of Education (cont'd)

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Manufacturing Tech Prep

Illinois Eastern Community College/Twin Rivers Regional Vocational System
Edwards/Wabash/Wayne/White Vocational Systems/Clay/Jasper/Richland Regional Vocational System
233 East Chestnut Street
Olney, IL 62450
ATTN: Kenton Peak or Debra Hunter
(618) 395-4351

Manufacturing Tech Prep

Illinois Valley Community College/Starved Rock Associates for Vocational and Technical Education
2578 East 350th Road
Oglesby, IL 61348
ATTN: John Allen
(815) 224-2720 (Ext.408)

Tech Prep for the 90's

John A. Logan College/Williamson County Education for Employment Delivery System/Jackson-Perry
Counties Education for Employment Delivery System
Carterville, IL 62918
ATTN: Paul McInturff
(601) 985-3741

Tech Prep - Doing with Understanding

Joliet Junior College/Three Rivers EFE System
1216 Houbolt Avenue
Joliet, IL 60436-9352
ATTN: J.D. Ross
(815) 729-9020 (Ext. 227)

A Model Tech Prep Program

Lake County Area Vocational System/College of Lake County
19525 West Washington Street
Grayslake, IL 60030-1194
ATTN: Richard Glogovsky
(708) 223-6681

Riverbend Tech Prep

Lewis and Clark Community College/Illinois Valley Regional Vocational System
5800 Godfrey Road
Godfrey, IL 22035
ATTN: Marguerite Boyd
(618) 466-3411

ILLINOIS

Illinois State Board of Education (cont'd)

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Tech Prep

Northwest Suburban Career Cooperative/William Rainey Harper College
1750 South Roselle Road
Palatine, IL 60067
ATTN: Pam Block
(708) 359-3300

Tech Prep

Parkland College/Champaign-Ford Vocational System
2400 West Bradley Avenue
Champaign, IL 61821
ATTN: Charles Baldwin and Aillinn Dannave
(217) 351-2200

Tech Prep Core

Quad Cities/Tri-County EFE Systems/Black Hawk Community College
1275 42nd Avenue
East Moline, IL 61244-4100
ATTN: Karen Johnson and Gordon Kinhead
(309) 752-1691

Manufacturing Tech Prep

Rock Valley College/Career Education Associates of North Central Illinois
3310 North Mulford Road
Rockford, IL 61111
ATTN: Don Johnson or Julie Nichols
(815) 654-4267 or 226-1755

Tech Prep

West Central Region of Education for Employment/John Wood Community College
219 Baldwin Drive
Quincy, IL 62301
ATTN: Daniel Arterburn
(217) 224-3700

ILLINOIS

Illinois Valley Community College
2578 East 350th Road
Oglesby, IL 61348-1099

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1. How large is your Tech-Prep consortium?
 - A. 6-9 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Community College (1)
 - B. Regional Vo-Tech Educational System (1)
 - C. High Schools (7)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Principal and Team members from Counseling, Mathematics, Communications, Science, Vo-Tech Education from each of the seven high schools.
 - B. Community College
 - C. Others: Regional Vocational System (Starved Rock Associates for Voc-Tech Education - High School Consortium: 18 schools)
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Illinois Valley Community College	2400
Seven High Schools	200 to 1400 (Range)
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts/Trades
 - E. Agriculture
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

As part of the Tech Prep project, there is on-going integration of academics and vocational-technical education in the areas of Communication, Mathematics, and Science. Workshops have been conducted. Next year extensive meetings will be held to develop curriculum materials for the Tech Prep program. Integration of Academic and Vocational-Technical education will be an essential component of our Tech Prep project.

ILLINOIS

John A. Logan College
Carterville, IL 62918
ATTN: Tom Davenport
(800) 851-4720

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1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System
 - B. Community Colleges
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
John A. Logan College	6000
Herrin High School	900
Johnston City High School	500
Crab Orchard High School	125
Marion High School	1200
Carterville High School	500
Elverado High School	170
Gorham High School	70
Carleondale High School	1800
Murphysboro High School	900
DuQuois High School	670
Trico High School	600

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts/Trades
 - E. Agriculture
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Tech Prep Teams in each region are composed of three academic teachers and two vocational teachers. These teams lead the project's efforts.

Lewis & Clark Community College
 5800 Godfrey Road
 Godfrey, IL 62035-2466
 ATTN: Marguerite E. Boyd
 (618) 466-3411 or (800) 642-1794

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1. How large is your Tech-Prep consortium?
 - A. 6-9 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (8 high schools)
 - B. Community College
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community College
 - C. Other: Teach-Prep Steering Committee made up of business and industry representative
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
3 implementation sites	1500
5 planning sites	3000
Community College	2000

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
 - C. Industrial Arts/Trades
 - D. Other: Hospitality-Hotel & Restaurant Management
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

The integration of academics will be addressed by implementing Principles of Technology, Applied Mathematics, and Applied Communications from CORD; incorporating substantial teacher in-service to enhance locally developed curricula; identifying site cities and internships for academic instructors with local business and industry; and introducing the "team" approach to each high school and on college campus.

ILLINOIS

Productive Chicago
226 West Jackson RM 1420
Chicago, IL 60606

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1. How large is your Tech-Prep consortium?
 - A. 16-20 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (25%)
 - B. Community Colleges (25%)
 - C. Business and Industry (50%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems (20%)
 - B. Community Colleges (40%)
 - C. Others: Business and Industry (40%)
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Start-up anticipated in January 1992 (Financial Services with 60 students).
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Industrial Arts/Trades/Metalworking
 - B. Other: Financial Services
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Organization chart for the Chicago citywide plan may be found in Appendix.

ILLINOIS

William Rainey Harper College
1200 West Algonquin Road
Palatine, IL 60067-7398
ATTN: Dr. George Voegel
(708)397-3000

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (75%) (3 HIGH SCHOOL DISTRICTS[12 high schools])
 - B. Community College (25%) (1)
3. Organizational leadership; for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

The straight Tech-Prep programs now have 54 juniors and seniors in the high schools committed to Corporate Careers, Electronic, Drafting/CAD, Office Technology, Fire Science, etc. There are students enrolled in both the college and high school courses.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Attached Corporate Career sheets for the Insurance and Banking/Finance programs represent the new prototypes for all 15-17 Tech-Prep programs that are being developed.

INDIANA

Ivy Tech
Indiana's Technical College
3208 Ross Road
P.O. Box 6299
Lafayette, IN 47903
ATTN: Lyn A. Batzer

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System
 - B. Other: Technical College
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Vocational Schools
 - C. Technical College
4. What are the approximate enrollments of the Tech-Prep consortium participants?

N.A.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

An enclosed brochure describes the statewide Tech Prep program model in Indiana. Ivy Tech's regional campus, in conjunction with Mishawaka High school, is one of five pilot sites in the state. Implementation should be statewide by 1994-95.

South Suburban College
15800 South State Street
South Holland, IO 60473

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (3)
 - B. Community College (1)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community College
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE enrollment
Community College	4000
School District 1	9000 (Grades 9-12)
School District 2	4000
School District 3	6000

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Others: Will expand to CAD and Secretarial in FT 92
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Academic faculty perform an occupational "audit" of their texts. Additional occupational information/examples are brought in as needed. An Advisory Committee of Practitioners is used to assist in the process.

Butler County Community College
901 South Havehill Rd.
El Dorado, KS 67042-3280

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (50%)
 - B. Community College(s) (50%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
4 members	100

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

High school courses in Principles of Technology I/II and Applied Mathematics and Communication are articulated with the local community college. The community college has an articulation agreement with the local university that allows those courses to be transferred.

Garden City Community College
801 Campus Drive
Garden City, KS 67846
(316)276-7611

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1. How large is your Tech-Prep consortium?

A. 2-5 members

This is our first year of Tech Prep. Plans are underway to enlarge the consortium next year to include neighboring districts.

2. Which entities hold membership in your Tech-Prep consortium?

A. Local School System (50%)

B. Community College (50%)

The nearest vocational school is 65 miles away, so it has not been included in the consortium.

3. Organizational leadership for the consortium is derived primarily from which members?

A. Local School Systems

B. Community Colleges

Organizational leadership is shared equally through monthly joint administrator meetings and through the efforts of the project coordinator.

4. What are the approximate enrollment of the Tech-Prep consortium participants?

Garden City High School enrolls 1697 students. Of those 474 (grades 9 to 12) are involved in this first year Tech-Prep effort.

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?

A. Health

B. Office Occupations

C. Technology

D. Industrial Arts/Trades

E. Agriculture

F. Other: Child Care, Education, Accounting

6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Our program is competency-based and each program has formal articulation agreements. Enclosed are sample competency profiles, articulation agreements, and a Student Handbook which defines each program. Also enclosed are applications and a brochure. Feel free to ask for further assistance.

Kentucky State University
Community College
Frankfort, KY 40601

1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems
 - B. Community Colleges
 - C. Vocational Schools
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Enrollment begins Fall 1992.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Our efforts in Tech Prep are just underway with a one year planning period followed by implementation of Industrial Technology, Office Administration, and Nursing over a five-year period.

KENTUCKY

University of Kentucky
Owensboro Community College
4800 New Hartford Road
Owensboro, KY 42303-1899

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (33%)
 - B. Community Colleges (33%)
 - C. Vocational Schools (33%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School System
4. What are the approximate enrollments of the Tech-Prep consortium?

N.A.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

A brochure describing the Owensboro Tech-Prep program is enclosed. There is also a description of the Owensboro program in Dale Parnell's book TECH PREP.

University of Kentucky Community College System
Breckinridge Hall
Lexington, KY 40506-0056

In February of this year, the University of Kentucky Community College System co-sponsored a Tech-Prep Conference with the Kentucky Department of Education and the Kentucky Department of Adult and Technical Education. The purpose of the conference was to bring together teams of superintendents, school board chairs, principals, regional vocational directors, and community college representatives to begin the process of development/implementation of Tech-Prep programs in Kentucky.

As a result of the conference, a number of our community colleges are in the process of preparing proposals for Tech-Prep programs in conjunction with postsecondary schools and technical institutions in the state. Approximately 1.125 million dollars is available for funding proposals submitted by consortia of local educational agencies and postsecondary educational institutions. The proposals submitted will be reviewed by the Department for Adult and Technical Education in the Kentucky Cabinet for Workforce Development.

LOUISIANA

Delgado Community College
615 City Park Avenue
New Orleans, LA 70119
ATTN: Anthony Molina
(504) 483-4141

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On April 11, 1991, representatives from Delgado Community College, St. Tammany Public Schools, Jefferson Parish Public Schools, Orleans Parish Public Schools, Southern University at New Orleans, and the University of New Orleans met to officially develop a consortium. The formation of the Metropolitan ACCESS (accumulated college credit earned in secondary schools) is the first 2+2 Tech Prep consortium in the state.

MARYLAND

Montgomery College
Central Administration
900 Hungerford Drive
Rockville, MD 20850

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (50%)
 - B. Community College (50%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
 - C. Others: Advisory Committee
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Montgomery County Public Schools	26
Montgomery College	Program began 1991 (0)
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Technology
 - B. Agriculture
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Policy is determined by a Steering Committee with representatives from the school system and community college. An Industry Advisory Committee reviews/advises the Steering Committee. Academic planning has been a joint venture from the inception of the project.

MICHIGAN

Jackson Community College
2111 Emmons Road
Jackson, MI 49201
ATTN: Allaire George
(517) 787-8088

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Document forwarded entitled: Jackson County Tech Prep Program: Overview for Tech Prep Teams.

MICHIGAN

Northwestern Michigan College
1701 East Front Street
Traverse City, MI 49684-3061
ATTN: Roberta Teahen
(616) 922-1151

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1. How large is your Tech-Prep consortium?
 - A. 16-20 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (40%)
 - B. Community Colleges (25%)
 - C. Vocational Schools (30%)
 - D. Intermediate Units (5%)
 - E. Other: We will add Business and Industry
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
 - B. Vocational Schools
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Not operational yet -- 15 high schools.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Technology
 - C. Health (will add)
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Applied materials from CORD will be introduced in K-12. Enclosed "Northwestern Michigan Tech Prep Task Force" and other materials.

MICHIGAN

Oakland Community College
George A. Bee Administration Center
2480 Opdyke Rd
P.O. Box 812
Bloomfield Hills, MI 48304

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1. How large is your Tech-Prep consortium?
 - A. 20 or more members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System
 - B. Community Colleges
 - C. Vocational Schools
 - D. Intermediate Units
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
 - B. Intermediate Units
4. What are the approximate enrollments of the Tech-Prep consortium participants?

150 FTE (approximate -- not sophisticated enough to track)
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?

Attachments enclosed.
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

A very complete multi-layered system which, at its core, seeks to alter existing relationships between discipline levels of education and between education and the "real world."

OCC sent some materials developed by the Oakland County Technology Education Steering Committee as a comprehensive educational model for the preparation of students for a changing technological world which may be of interest to others.

Schoolcraft College
18600 Haggerty Road
Livonia, MI 48152-2696
ATTN: Ann V. Doty
(313) 462-4454

1. How large is your Tech-Prep consortium?

- A. 16-20 members

Three steering consortium and steering committees: Leadership, Curriculum, Counseling, Career, and Marketing.

2. Which entities hold membership in your Tech-Prep consortium?

- A. Local School Systems (25)
 - B. Community Colleges (25)
 - C. Vocational Schools (15)
 - D. Intermediate Units (25)
 - E. Others: Adult Education

3. Organizational leadership for the consortium is derived primarily from which members?

- A. Community Colleges

4. What are the approximate enrollments of the Tech-Prep consortium participants:

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Schoolcraft College of Detroit Public Schools	20
Schoolcraft College/Wayne Westland Schools	2
Schoolcraft College/Garden City	2

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?

- A. Health
 - B. Industrial Arts/Trades
 - C. Other: Culinary Arts

6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Catalog is attached. We have a core curriculum, required placement testings, mandated remediation and exit testing.

Jefferson College
 P.O. Box 1000
 Hillsboro, Missouri 63050
 ATTN: Ray Walsh
 (314) 789-3951/942-3000

We have been, for more than 20 years, allowing high school seniors to begin postsecondary programs. This has been relatively easy for us as our College also operates the area vocational school for the local districts in our area. I think we are doing most of what the new thrust will be under the Perkins legislation.

For example, we have prerequisite courses at the 11th grade level for students desiring to enter our electronics programs. Students having met the prerequisites may enroll in electronics during their senior year of high school. At the 13th grade level, students complete electronics (general) and may, if they choose, continue to major in telecommunications, laser electro-optics, or robotics.

1. How large is your Tech-Prep consortium?

A. 10-15 members

2. Which entities hold membership in your Tech-Prep consortium?

A. Local School System (9)
 B. Community College (1)
 C. Vocational School (1)

3. Organizational leadership for the consortium is derived primarily from which members?

A. Community Colleges

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
AUTS	4000
High School Districts (9)	6000

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?

A. Technology

6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

They are not integrated or "applied" at this time.

NEBRASKA

33

Metropolitan Community College
P.O. Box 3777
Omaha, NE 68103-0777

1. How large is your Tech-Prep consortium?
 - A. 6-9 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (64%)
 - B. Community College (9%)
 - C. Others: Chamber of Commerce, Educational Service Units (27%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Community College	5,000
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts/Trades
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

This is being addressed through suggested high school courses; community college degree requirements; use of applied academics (Principles of Technology, Applied, Mathematics, etc.). An enclosure gives a description of proposed Tech-Prep curriculum. (See Appendix.)

Mid-Plains Technical-Community College Area
Area Office
416 North Jeffers
North Platte, NE 69101

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (50%)
 - B. Community Colleges (50%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Mid-Plains Community College	1050
North Platte Public School (9-12)	1025

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

The public school is allowing their people in Tech-Prep to attend classes at college from 8:00 a.m. until noon. The college will give credit for some of their high school classes. The vocational faculty of the high school and faculty from specific technical areas have worked on competencies to properly guide the students in current courses.

NEBRASKA

Northeast Community College
801 East Benjamin Avenue
P.O. Box 469
Norfolk, Nebraska 68702
ATTN: Leon Engelbart

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1. How large is your Tech-Prep consortium?

Responses relate to Career/Prep:

A. 2-5 members. There are approximately 65 small school districts in our area that might choose to partially participate in the future.

2. Which entities hold membership in your consortium?

- A. Local School Systems
- B. Community Colleges

3. Organizational leadership for the consortium is derived primarily from which members?

- A. Local School Systems
- B. Community Colleges

4. What are the approximate enrollments of the Tech-Prep consortium participants?

N.A.

5. What occupational skill areas are being emphasized by the consortium?

- A. Health/Human Services
- B. Business
- C. Engineering Option
- D. Agriculture (some)
- E. Other: Humanities (with a back-up career option)

6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

This is the program being promoted. It will be implemented several grades at a time over 3-4 years:

- 7-8 Exploratory
- 9-12 All students in one of the career options
- 11-12 Will include some dual credits with the college

Clark County Community College
3200 East Cheyenne Avenue
North Las Vegas, Nevada 89030
ATTN: David Hoggard
(702) 643-6060 (Ext. 205)

1. How large is your consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems
 - B. Community Colleges
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
 - C. Others: Jointly administered.

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Clark County School District	330
Community College of South Nevada	60

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
 - C. Industrial Arts/Trades
 - D. Agriculture
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Academic courses for specific programs are identified in a 2 + 2 Tech Prep Guide.

Camden County College
P.O. Box 200 College Drive
Blackwood, NJ 08012
ATTN: Dr. Ramsay

1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (80%)
 - B. Community Colleges (100%)
 - C. Vocational Schools (100%)
 - D. Others: County Technical Institute
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

800

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
High School	14
County Vocational School	1
Community College	1 (12,000FTE)

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Technology
 - C. Technology
 - D. Industrial Arts/Trades
 - E. Other: High Technology Robotics, Lasers, Fiber Optics
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

The community college maintains academic responsibility which it delegates or shares with other school systems. The goal is to have students academically move into the college community and move up the educational ladder. College faculty meet with consortium members and other faculty to share and give direction to the program.

NEW MEXICO

Clovis Community College
417 Schepps Boulevard
Clovis, NM 88101

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (80%)
 - B. Community Colleges (20%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Clovis Community College	1500
Clovis Municipal Schools	1200
Texico	100
Melrose	100
Ft. Sumner	200

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Industrial Arts/Trades (Drafting)
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.
 1. Prior testing for basic skills in certificate program.
 2. Require regular college level general education requirement for Associate Degree.
 3. Regular general education high school requirements.
 4. Applied mathematics, English, and science for high school vocational students.

NEW MEXICO

San Juan College
 4601 College Blvd.
 Farmington, NM 87402
 ATTN: David L. Caffey
 (505) 599-0217/0245

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (80%)
 - B. Community Colleges (20%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
San Juan College	1,668
Aztec Schools	900 (9-12)
Bloomfield Schools	1,000 (9-12)
Central Schools (3 high schools)	1,700 (9-12)
Farmington Schools	2,050 (9-12)

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
 - C. Industrial Arts/Trades
6. Briefly describe, or attach appropriate document, the manner in which the integration of academics is being addressed.

Presently installing Applied Mathematics and Applied Communications in the six public high schools in the four participating districts. Just getting started.

NEW MEXICO

The University of New Mexico
Valencia Campus
280 La Entrada
Los Lunas, NM 87031
ATTN: Director of Instruction

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (75%)
 - B. Community Colleges (25%)
3. Organizational leadership for the consortium is derived primarily from which member?
 - A. Community College
4. What are the approximate enrollments of the Tech-Prep consortium participants?

New program. Unknown.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Industrial Arts/Trades
 - C. Agriculture
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

This is already built into the community college program and being recommended strongly in the Tech Prep counterpart at the local high schools.

NEW YORK

Erie Community College
121 Ellicott Street
Buffalo, NY 14203

41

1. How large is your Tech-Prep consortium?
 - A. 20 or more members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (33%)
 - B. Vocational Schools (33%)
 - C. Others: four-year technical colleges (33%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Local Vocational high schools	60
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

State Tech-Prep Grant Application and transfer articulation agreements are attached.

NEW YORK

42

Fashion Institute of Technology
Seventh Avenue at 27 Street
New York, NY 10001-5992
ATTN: Cynthia Wellins

Questionnaire sent to Mr. Mike Van Ryn, Assistant Commissioner for High Education Services, Cultural Education Center, 5A37, New York State Department of Education, Albany, New York 12230. In 1990 Mr. Van Ryn gave a masterful presentation on 2 + 2 programs in New York State at the Albany Conference on Tech-Prep.

NEW YORK

Hudson Valley Community College
Vanderburgh Avenue
Troy, NY 12180

43

1. How large is your Tech-Prep consortium?
 - A. 6-9 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (50%)
 - B. Community Colleges (16%)
 - C. Others: BOCES/2 units (33%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
 - C. Others: BOCES
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
HVCC-Hudson Valley Community College	6600
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Faculty from institutions involved have reviewed curriculum or participated in the development of new curricula from which articulation agreements have been established.

NORTH CAROLINA

Caldwell County Schools

Local Listing of Community Colleges with commuting distance of Caldwell County:

Caldwell Community College and Technical Institute
1000 Hickory Blvd.
Hudson, NC 28638
(704) 726-2230

Catawba Valley Community College
Hickory, NC 28603
(704) 32709124

Western Piedmont Community College
1001 Burkemont Avenue
Morganton, NC 28655
(704) 438-6000

Wilkes Community College
P.O. Box 120
Wilkesboro, NC 28697
(919) 667-7136

Booklet available from school system: **WHAT I MUST KNOW BEFORE HIGH SCHOOL REGISTRATION: A CAREER AND COURSE PLANNING GUIDE FOR EIGHTH-GRADERS**
(Warning: Not taking this booklet seriously could cost you thousands of dollars over your lifetime.)

NORTH CAROLINA

45

Cape Fear Community College
411 North Front Street
Wilmington, NC 28401-3993
ATTN: James D. Bartlett

1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (50%)
 - B. Community College (50%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

We will not complete our first year until June 1991. The enrollment should be in excess of 20% of the high school freshmen.
5. What occupational skill areas are being emphasized by the Tech-consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts/Trades
6. Briefly describe, or attach appropriate document, the manner in which the integration of academics is being addressed.

Attachment enclosed: Brochure : "Tech Prep: Opening the Doors to a Brighter Future..."

NORTH CAROLINA

**Catawba Valley Community College
Route 3, Box 283
Hickory, NC 286022
ATTN: Jerry Thompson**

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System
 - B. Community College
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

None. First class will be Fall 1991.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Art/Trades
 - E. Agriculture
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Booklet enclosed: TECH PREP: EDUCATION FOR THE MAJORITY

NORTH CAROLINA

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Craven Community College
P.O. Box 885
New Bern, NC 28531
(919) 638-4131
ATTN: Jean Hemphill and Gerald McGowan

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local school systems
 - B. Community Colleges
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community College
4. What are the approximate enrollments of the Tech-Prep consortium participants?

1990-1991 first year of the program. 600/9th grade students chose the course in the Tech-Prep strand.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium.

Descriptive brochure enclosed.
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Tech-Prep brochures and a copy of the Agreement between the New Bern-Craven County Schools and Craven Community College enclosed.

NORTH CAROLINA

Department of Public Instruction
116 West Edenton Street
Raleigh, NC 27603-1712

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Materials sent include:

1990-91 Grant Proposal Requests for Tech Prep Planning/Implementation Grants

1991-92 Request for Proposals for Tech Prep

Sample RFP (Complete)

Executive Summary of Worker Training Trust Fund Tech Prep Projects which include:

Buncombe County Schools

Cabarrus County Schools

Carteret County Schools

Davie County Schools

Lexington City Schools

McDowell County Schools

New Bern-Craven County Schools

Pitt County Schools

Reidsville City Schools

Robeson County Schools

Warren County Schools

NORTH CAROLINA

**Southwestern Community College
275 Webster Road
Sylva, NC 28779**

49

- 1. How large is your Tech-Prep consortium?**
 - A. 6-9 members**
- 2. Which entities hold membership in your Tech-Prep consortium?**
 - A. Local School Systems (60%)**
 - B. Community Colleges (40%)**
- 3. Organizational leadership for the consortium is derived primarily from which members?**
 - A. Local School Systems**
 - B. Community Colleges**
- 4. What are the approximate enrollments of the Tech-Prep consortium participants?**

Cooperative Agreement 100-150
- 5. What occupational skill areas are being emphasized by the Tech-Prep consortium?**
 - A. Health**
 - B. Office Occupations**
 - C. Industrial Arts/Trades**
- 6. Briefly describe, or attach appropriate document, the manner in which the integration of academics is being addressed.**

SCC's Tech-Prep program with the area public schools is a cooperative effort to strengthen the background of the high school students so that he/she will be more likely to succeed at the community college level. Our cooperative agreement provides dual credit coursework in the area high schools.

NORTH CAROLINA

Wake Technical Community College
9101 Fayetteville Rd.
Raleigh, NC 27603-5696

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1. How large is your Tech-Prep consortium?

A. 16-20 members

2. Which entities hold membership in your Tech-Prep consortium?

A. Local School Systems (56%)

B. Community Colleges (44%)

3. Organizational leadership for the consortium is derived primarily from which members?

A. Local School Systems

B. Community Colleges

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Community College	8
Public Schools	10

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?

Anticipated Fall 1992

A. Office Occupations

B. Technology

C. Other: Service

6. Briefly describe, or attach appropriate document, the manner in which the integration of academics is being addressed.

We anticipate providing five directions for the high school student: (1) Entering the workforce upon graduation from high school; (2) taking high school courses that would provide a background for further study in Business; (3) Engineering Technology; (4) the service area; or (5) enrolling in a traditional senior college preparatory sequence.

NORTH CAROLINA

**Wayne Community College
Caller Box 8002
Goldsboro, NC 27533-8002**

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1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (66%)
 - B. Community Colleges (33%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

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5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Agriculture
 - D. Other: Business, Marketing, Drafting, Automotive
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Algebra I and II in public schools and grade level or above English classes for Tech Prep secondary students.

Columbus State Community College
550 East Spring Street
P.O. Box 1609
Columbus, Ohio 43216-1609

1. How large is your Tech-Prep consortium?
 - A. 6-9 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (29%)
 - B. Community Colleges (14%)
 - C. Vocational Schools (43%)
 - D. Other- Franklin University (14%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Columbus Public Schools; 65,600
South-Western City Schools; 16,300
Delaware Joint Vocational School; 270
Eastland Vocational Schools; 1048
Tolues Technical Center; 500
Columbus State Community College; 7620
Franklin University; 2695
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts/Trades
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.
 - (1) Advanced placement (time-shortened) vocational-technical articulation agreements
 - (2) 2+2+2 articulation linking vocational, technical, and baccalaureate programs
 - (3) Dual enrollment/dual credit articulation for vocational high school seniors in college, technical, and academic.

OHIO

Jack Steinicke
Lakeland Community College
Rt. 306 & 1-90
Mentor, OH 44060-7594

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1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (82%)
 - B. Community Colleges (9%)
 - C. Vocational Schools (9%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
 - C. Vocational Schools
 - D. Other- Tech Prep Coordinator
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Lakeland Community College	4120
Auburn Career Center	3500
Fairport Exempted Village Schools	240
Kirtland Local Schools	300
Madison Local Schools	1045
Mentor Exempted Village Schools	3200
Painesville City Schools	580
Painesville Local Schools	930
Perry Local Schools	450
Wickliffe City Schools	550
Willoughby/Eastlake City Schools	2665

Enrollment figures represent number of students in grades 9-12.

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
 - C. Industrial Arts/Trades
 - D. Other- Early Childhood Education
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

A series of articulation meetings has been established between key faculty members of each participating school district and the college. These meetings have provided an opportunity for each high school program to be compared to the entry level expectations at the college. It is anticipated that this process will provide the basis for an effectively integrated curriculum.

Raymond Walters General and Technical College
9555 Plainfield Road
Cincinnati, OH 45236

1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Regional Campuses of Research I university (U. of Cincinnati) (27%)
 - B. Vocational Schools (27%)
 - C. Others: Vocational Education Planning Districts (40%) and Technical College (7%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Vocational Educational Planning Districts
 - B. Vocational Schools
 - C. Others: Technical College, University Regional Campuses
4. What are the approximate enrollments of the Tech-Prep consortium participants?

We do not have this information.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts
 - E. Other: Commercial Arts
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Teams from all involved schools and colleges will develop appropriate curriculum focusing on applied mathematics and sciences. General Education will be included. Transferability of courses to baccalaureate institutions will be addressed.

OHIO

Sinclair Community College
444 West Third Street
Dayton, Ohio 45402-1460
ATTN: Art Ross

55

1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems
 - B. Community Colleges
 - C. Vocational Schools
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Local School	Just initiated
Vocational School	18
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Curriculum progression from high school program to college degree program described in the attachment enclosed.

OREGON

Central Oregon Community College
2600 N.W. College Way
Ben, OR 97701-5998
ATTN: Marilyn Davis
(303) 382-6112 (Ext. 350)

56

1. How large is your Tech-Prep consortium?

A. 6-9 members

2. Which entities hold membership in your Tech-Prep consortium?

Local School Systems (78%)
Community Colleges (11%)
Intermediate Units (11%)

3. Organizational leadership for the consortium is derived primarily from which members?

A. Community Colleges
B. Intermediate Units

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Central Oregon Community College	170 Vocational/670 Total
Bend High School	1328 ADM
La Pine High School	416 ADM
Redmond High School	1223
Culver High School	146 ADM
Marcus High School	612 ADM
Crook County High School	737 ADM

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?

A. Office Occupations
B. Technology
C. Industrial Arts
D. Other: Manufacturing

6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.
Using the national applied academic curricula developed through the National Consortium.

Note: We use Tech-Prep as a curriculum planning activity which directly connects secondary-postsecondary programs. We are currently doing advanced placement but are working toward "true Tech-Prep."

OREGON

Clackamas Community College
19600 South Molalla Avenue
Oregon City, OR 97045

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1. How large is your Tech-Prep consortium?
 - A. 10-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (50%)
 - B. Community Colleges (10%)
 - C. Intermediate Units (10%)
 - D. Others: Employment, ETBS, Higher Education (30%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community Colleges
 - B. Intermediate Units

4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollments
Secondary	10,500
Community College	3,500

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Office Occupations
 - B. Technology
 - C. Industrial Arts/Trades
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Academics is integrated into competency-based curriculum by such courses as Applied Mathematics and Communications at the secondary level and team teaching of academics at the post-secondary level.

PENNSYLVANIA

Commission for Community Colleges
Pennsylvania Association of Colleges and Universities
800 North Third Street
Harrisburg, PA 17102-3212
ATTN: David Daniel
(717) 233-4723

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I am forwarding your questionnaire concerning a Tech-Prep consortium to Dr. Edward M. Sweitzer, President, Montgomery County Community College, 340 DeKalb Pike, Blue Bell, PA 19422-0758. Dr. Sweitzer's institution is leading the way in Pennsylvania in the development and implementation of Tech-Prep.

PENNSYLVANIA

**Lackawanna Junior College
901 Prospect Ave.
Scranton, PA 18505
ATTN: Margaret Tobin
(717) 961-7835**

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Lackawanna Junior College is developing a tech-prep consortium which we hope to implement as early as Fall 1991. The consortium will most likely include the eight secondary institutions in Lackawanna County. Acting at the conduit, LJC will provide leadership for secondary school students and encourage them to complete their high school diploma to become productive members of the work force without restricting them from access to higher education. LJC has also developed a guaranteed articulation agreement with Temple University for the student interested in completing their Bachelor's Degree.

In the tenth grade of high school, the Career Prep Center of LJC will begin testing and counseling in secondary schools to help students realize and develop their potential, whether it be vocation or transfer. LJC is presently working with high school vocational instructors, i.e. business, to develop a core curriculum that will satisfy the mandates of the Department of Education and will also channel these students into areas where they will be most productive in the workplace.

SOUTH CAROLINA

Aiken Technical College
P.O. Drawer 696
Aiken, SC 29802-0696

60

1. How large is your Tech-Prep consortium?
 - A. 2-5 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (50%)
 - B. Community Colleges (50%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community College
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Institutional Member of Consortium	Approximate 1991 FTE Enrollment
Aiken Technical College	1110
Aiken County Public Schools	7000

5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Enclosures: TECH-PREP NEWS, TECH PREP: Preparation for Technologies (Partnership for Academic and Career Education, P.O. Box 587, Pendleton, SC 29670 (803) 646-8351 (Ext. 2107).

SOUTH CAROLINA

Partnership for Academic and Career Education

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Anderson Oconee, Pickens Schools Districts; Business and Industry Partners;
National Dropout Prevention Center, Clemson University; Tri-County Technical College
P.O. Box 587
Pendleton, SC 29670
ATTN: Diana Walter
(803) 646-8361

1. How large is your Tech-Prep consortium?
 - A. 16-20 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School System (44%)
 - B. Community Colleges (6%)
 - C. Vocational Schools (6%)
 - D. Others: Business, National Dropout Prevention Center, County Business and Education Partnership (44%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Others: a coordinating board
4. What are the approximate enrollments of the Tech-Prep consortium participants?

There are seven school districts involved in the PACE consortium. Five of the seven districts have, or are moving toward, a dual-option enrollment system (Tech-Prep/College Prep). The enrollments vary according to district and level of program implementation. In 1990, there were 2,657 course enrollments in Tech Prep (applied) academic courses. (Note: Numbers of students were enrolled in more than one applied academic course so the figure given is not an unduplicated count.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Industrial Arts/Trades
 - E. Agriculture
 - F. Other: Service Occupations
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

All school districts have, or are implementing, applied academics in grades 9-12. Applied courses involve all the CORD/AIT and other professionally developed courses (such as ChemCom), locally-developed or enhanced courses and state-developed courses. In addition, PACE has developed 7 modules using applications from local industry that are used as supplemental materials in applied academic courses.

SOUTH CAROLINA

State Department of Education
906 Rutledge Office Building
Columbia, S.C. 29201

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1. How large is your Tech-Prep consortium?
 - A. Will vary.
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems
 - B. Community Colleges
 - C. Vocational Schools
 - D. Others: Apprenticeship Programs
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Local School Systems
 - B. Community Colleges
 - C. Vocational Schools
4. What are the approximate enrollments of the Tech-Prep consortium participants?

Varies within the state.
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
 - C. Technology
 - D. Agriculture
 - E. Other: Trade and Industrial Education
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Applied academic courses in Mathematics, English, and Biology/Chemistry have been developed and teachers are being trained in special institutes to teach using applied academic concepts. A new curriculum for secondary and post-secondary education entitled "Preparation for the Technologies", has been developed to integrate academic and vocational education.

TEXAS

Laredo Junior College
West End Washington Street
Laredo, TX 78040-4395
(512) 722-0521

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1. How large is your Tech-Prep consortium?
 - A. 20-15 members
2. Which entities hold membership in your Tech-Prep consortium?
 - A. Local School Systems (and Area) (10) (71%)
 - B. Community College (1) (8%)
 - C. Others: University (1), JTPA, South Texas Quality Work Force (21%)
3. Organizational leadership for the consortium is derived primarily from which members?
 - A. Community College
4. What are the approximate enrollments of the Tech-Prep consortium participants?

43,378 (68.31% disadvantaged, 44.7% LEP)
5. What occupational skill areas are being emphasized by the Tech-Prep consortium?
 - A. Health
 - B. Office Occupations
6. Briefly describe, or attach appropriate documents, the manner in which the integration of academics is being addressed.

Occupational faculty determine the minimum English, reading, and mathematics entry skill levels for each of their disciplines. Students are assessed and mandatorily placed in remedial courses if necessary. If the students are close to the entry level he/she is allowed to enroll concurrently in remedial and occupational programs.

APPENDIX B
SAMPLE PROGRAMMATIC ENCLOSURES

Brief Description of Exemplary Program

Tech Prep Articulation Partnership: Benson High School and Portland Community College Portland, Oregon

Establishment of Tech Prep in Portland

In 1986 the State Department of Education approved legislation for a statewide 2+2 initiative. As a result of this legislation, Portland Community College District received funds from the Regional Cooperative Vocational Technical Program and formed a consortium - PAVTEC (Portland Area Vocational/Technical Education Consortium). The consortium members include, among others, 13 school districts and numerous associate members from business and higher education (e.g., Northwest Regional Education Labs, Tektronix, and Oregon State's Alliance for Program Improvement). The Consortium has an impressive record of 2+2 program development which is a result of their steady focus on three primary areas: partnerships, resources, and results. PAVTEC members work to: (a) build communication between schools and businesses, (b) build funds to finance equipment purchases, administrative needs, and operating costs, and (c) build support documents to encourage collaboration and disseminate their products and services. The most widely disseminated tech prep document is Portland's Tech Prep Handbook for Counselors and Students.

Basic Structure of Tech Prep Programs

The State of Oregon offers 11 approved areas of vocational education, and in 1989 the Department of Education voted to convert all vocational curricula to a competency-based system. The terms 2+2 tech prep refer to 2 years of high school preparation for a 2 year technical program offered at the community college. The latter two years are those required for an associate degree. There are no required courses for admission to tech prep programs, however, there is a strong emphasis on recommended classes in three areas: math, science, and technical. These recommended classes primarily include courses that carry advanced credit at the community college. There are 49 tech prep associate degree programs at Portland Community College, and 19 program areas are articulated with 27 schools in 15 districts. All the high schools offer articulated math courses. No high school offers all the articulated program areas, however, Benson High School offers the greatest number of articulated classes from a total of 13 program areas.

Beyond Curriculum: Job Training in Oregon and Workforce 2000 Legislation

From the beginning PAVTEC has attempted to market tech prep and foster collaboration between various education and business organizations. The Consortium has produced a number of products and services including: model articulation agreements, regular staff development seminars and workshops, a special needs directory, a newsletter, and the creation of student scholarships especially for special needs students. These efforts will continue to flourish, not only because of dedicated local leaders, but because significant state funding was recently made available through the "Oregon Workforce 2000 Act." This Act was passed in 1988 and supports the funding of literacy, education, and vocational technical job training for the state. Some of the specific goals are to: (1) increase youth enrollment in secondary, postsecondary apprenticeship programs that lead to family-wage jobs, (2) secure active participation of industry leaders and business owners in developing programs to improve worker education, and to increase the coordination of education and job training systems to respond to the training needs of workers.

In 1989 Portland Community College received \$810,000 Workforce 200 funds, together with other state and local funds PAVTEC allocated money for (a) purchasing new equipment for the high schools, (b) creating new instructional programs in manufacturing technology, and (c) for conducting a demonstration project at Benson High School focused on integrating math, English and science with computer-aided drafting.

ELECTRONIC ENGINEERING TECHNOLOGY - Sylvania
2 + 2 Tech Prep Associate Degree

A 2 + 2 Tech Prep Associate Degree Program ties together grades 11-14 in a continuous succession of courses. The associate degree is typically earned by completing 2 years of designated college courses after graduating from high school. By participating in the 2 + 2 Tech Prep Program, the student is not only certain to have met all of the community college's prerequisites, but may also be able to challenge and earn some of the associate degree credits while still in high school.

Advanced Credits - High school courses which may be taken to earn advanced credits for an associate degree are shown below in bold type. College courses which may be challenged or satisfied by high school courses are also in bold type. High school students should consult with their counselor or teacher to find out how to earn advanced credits.

Required courses - The 11th & 12th grade required courses to earn a high school diploma are the same for every student.

Elective Courses - The elective high school courses for this 2 + 2 Tech Prep program are recommended to provide the student with the best technical preparation for the given associate degree program. Students may choose to exceed or differ from what is recommended.

Changing or Exiting the Program - Flexibility and individual choice is guaranteed and easy to attain with the 2 + 2 Tech Prep Associate's Degree program. Students may enter, exit, or change programs at any time. For many programs there are 3 possible exit points which will leave the student with some entry-level job skills and credentials: 1) grade 12 - high school diploma; 2) grade 13 - Vocational Certificate; 3) grade 14 - Associate Degree. See the next page for more information about this program.

HIGH SCHOOL			
GRADE 11		GRADE 12	
<u>Semester 1</u>		<u>Semester 1</u>	
<u>Required Course</u>	<u>Credit</u>	<u>Required Course</u>	<u>Credit</u>
English	.5	English	.5
U.S. History	.5	Economics	.5
<u>Elective Course</u>		<u>Elective Course</u>	
Tech. Math	.5	Analysis	.5
Electronics 2	.5	Electronics 3	.5
Prin. Tech./Physics	.5	PASCAL 1	.5
		Mech. Drafting 2	.5

HIGH SCHOOL			
GRADE 11		GRADE 12	
<u>Semester 2</u>		<u>Semester 2</u>	
<u>Required Course</u>	<u>Credit</u>	<u>Required Course</u>	<u>Credit</u>
English	.5	English	.5
U.S. History	.5	Social Studies	.5
Health	.5		
<u>Elective Course</u>		<u>Elective Course</u>	
Tech. Math	.5	Analysis	.5
Electronics 2	.5	Electronics 3	.5
Prin. Tech./Physics	.5	PASCAL 2	.5
		Mech. Drafting 2	.5
TOTAL	6.0	TOTAL	6.0

COMMUNITY COLLEGE

GRADE 13

GRADE 14

First Term

<u>Course #</u>	<u>Title</u>	<u>Credit</u>
*EET 110	Prog. for Elec.	3
*EET 111	ElecCir/Dev.1	4
*EET 112	Digital Sys.1	4
*MTH 101	Coll. Algebra	4
*WR 121	Eng. Comp.	<u>3</u>
TOTAL		18

Second Term

*EET 121	ElecCir./Dev.2	4
*EET 122	Digital Sys. 2	4
*MTH 102	Trigonometry	4
*WR 122	Eng. Comp.	3
	General Educ.	<u>3</u>
TOTAL		18

Third Term

*EET 131	Elec Circ/Dev.3	4
*EET 132	Digital Sys.3	4
*EET 133	Calculus for Elec	4
CST 2.211	Software Prog.1	4
*WR 227	Tech. Writ. 1	<u>3</u>
TOTAL		19

*College Transfer

Fourth Term

<u>Course #</u>	<u>Title</u>	<u>Credit</u>
*EET 241	Micro. Sys. 1	4
*EET 242	Linear Sys. 1	4
*EET 243	RF Comm. Sys.	4
*EET 244	Seminar 1	1
	Elective	<u>4</u>
TOTAL		17

Fifth Term

*EET 251	Micro Sys. 2	4
*EET 252	Linear Sys. 2	4
*EET 254	Seminar 2	1
*PHY 201	Gen. Physics	4
	Elective	<u>4</u>
TOTAL		17

Sixth Term

*EET 261	Micro. Sys. 3	4
*EET 262	Power Elec.	4
CST 2.666	Unix. and C	4
*PHY 202	Gen. Physics	<u>4</u>
TOTAL		16

Grade Career Preparation

K-6: Career Awareness

7-8: Career Exploration

9-16: Career Preparation

Options:

College Preparation

**Associate Degree
Baccalaureate Degree
Advanced Degrees**

Technical Preparation

**Associate Degree
Baccalaureate Degree
Advanced Degrees**

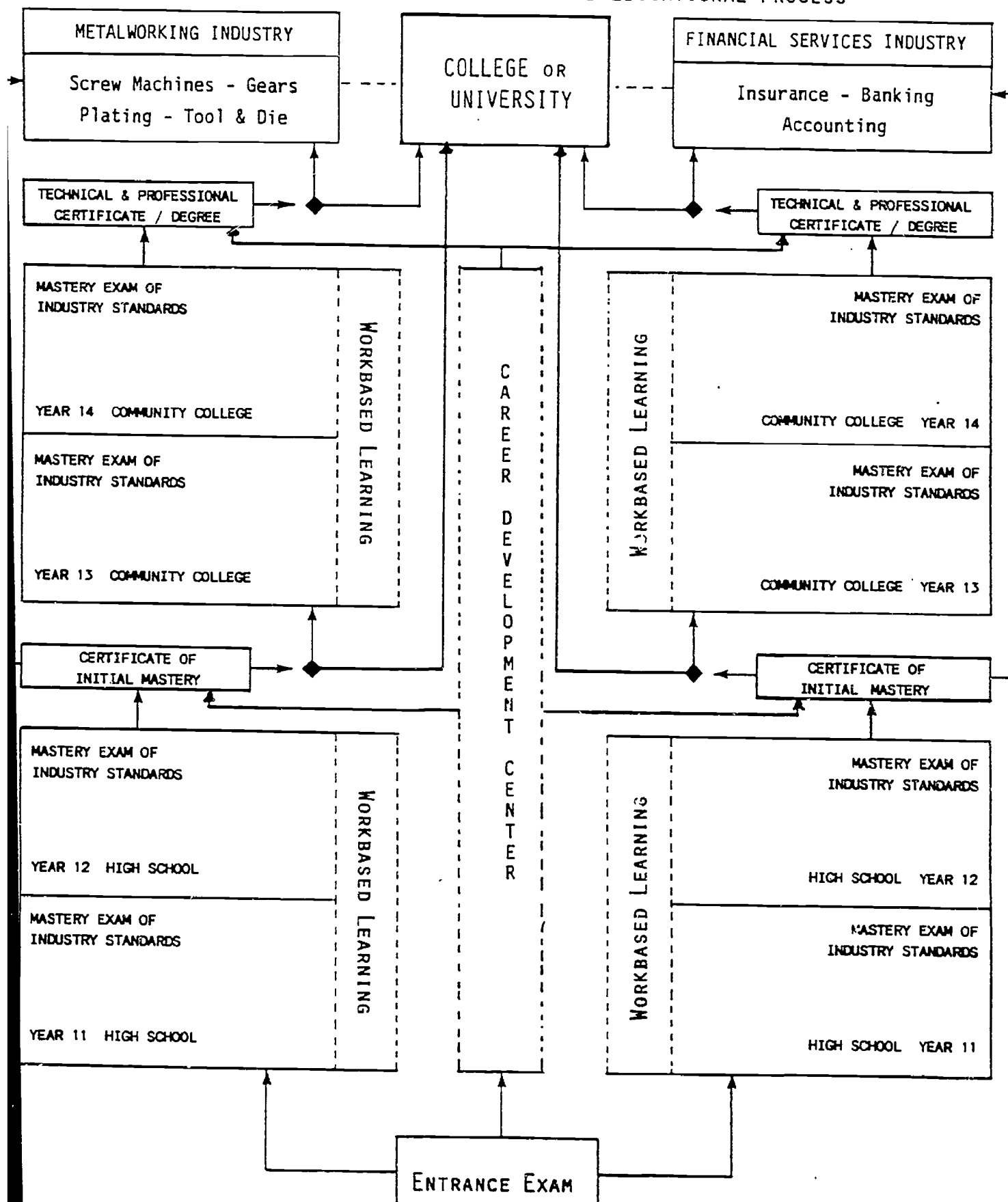
or

**Vocational Education + Applied Academics
Apprenticeship (Work-Based Learning)
Advanced Technology Training (ex.
Telecommunications, Computers,
Manufacturing, Lasers/Optics,etc.)**

CAREER PREPARATION INITIATIVE

INDUSTRY-DRIVEN, PERFORMANCE-BASED EDUCATIONAL PROCESS

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PRODUCTIVE CHICAGO
CITY COLLEGES OF CHICAGO

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Nebraska

ARCHITECTURAL DRAFTING AND DESIGN

Omaha Public Schools and METRO Community College
2 + 2 Tech Prep Associate Degree Program

OPS/METRO Course Schedule

Grade 9	Grade 10	Grade 11	Grade 12	Grade 13	Grade 14
<u>Required</u> A34 English 1-2 C21 World Geo 1-2 <u>Required - 2+2 Tech Prep</u> Q18 Tech Explor 1-2 D27 Algebra 1-2 <u>Recommended</u> F41 Bio or F50 Phy Sci L60 Computer/Kbdg 1-2	<u>Required</u> A41 English 3-4 C25 American Gov G93 Human Growth & Devel <u>Required - 2+2 Tech Prep</u> Q20 Design Engin'g 1-2 or Q25 CAD D35 Geometry 1-2 <u>Recommended</u> F60 Physics K21 Art 1-2	<u>Required</u> A47 English 5-6 C31 Am History 1-2 <u>Required - 2+2 Tech Prep</u> Q22 Design Engin'g 3-4 or Q27 CAD <u>Recommended</u> D29 Algebra 3-4 Q38 Ind Tech 1-2 N81 Hsg & Home Mgmt 1-2	<u>Required</u> A53 English 7-8 C38 World History 1-2 <u>Required - 2+2 Tech Prep</u> Design Engin'g/CAD (Independent Study) <u>Recommended</u> Q63 Bldg Const 1-2 (if available) Q33 Mat & Process 1-2	ACT 100 Intro to Dltg ACT 104 Dltg Techniques ACT 110 Dim and Tol MAT 122 Inter Algebra CET 105 Bldg Const ACT 116 Survey ACT 117 Dwgs and Specs ACT 118 Std Det Prac MAT 124 Trig & Funct ACT 126 Plmbg Fund ACT 127 Htg & A/C Fund ACT 128 Elect Wkg Dwgs ACT 128 Elect Fund English Requirement (9 qtr hrs)	ACT 250 AutoCAD I ACT 251 Auto CAD II ACT 252 AutoCAD III CET 108 Est Const Csts ACT 206 Fndn & Plns ACT 207 Firmg Plns ACT 208 Arch Sched ACT 216 Plmbg Wkg Dwgs ACT 217 Htg & Air Cond ACT 218 Elect Wkg Dwgs Soc Sci Requirement (4.5 qtr hrs)
OMAHA PUBLIC SCHOOLS Also Required: Physical Education (2 years) or HS ROTC (4 years). Math (2 years) and Science (2 years). Recommended math and science courses are shown. NOTE: High school courses which may be taken to earn advanced credit at METRO are shown in bold type.				METRO COMMUNITY COLLEGE Course Requirements for Architectural Drafting and Design (Associate Degree) NOTE: College courses which may be satisfied by high school courses are shown in bold type	

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TECH-PREP MODEL

With information gained from the TECH-PREP working group, a draft model was developed, consisting of five major components (a graphic representation of this model is presented in Figure 1):

- TECH-PREP Readiness
- A Secondary TECH-PREP Program
- An Adult TECH-PREP Program
- Postsecondary TECH-PREP Associate Degree Programs
- Apprenticeship, Internship, and Other Business/Education Partnerships

TECH-PREP—A PATH TO MID-LEVEL TECHNOLOGY CAREERS
AND A LIFETIME OF LEARNING

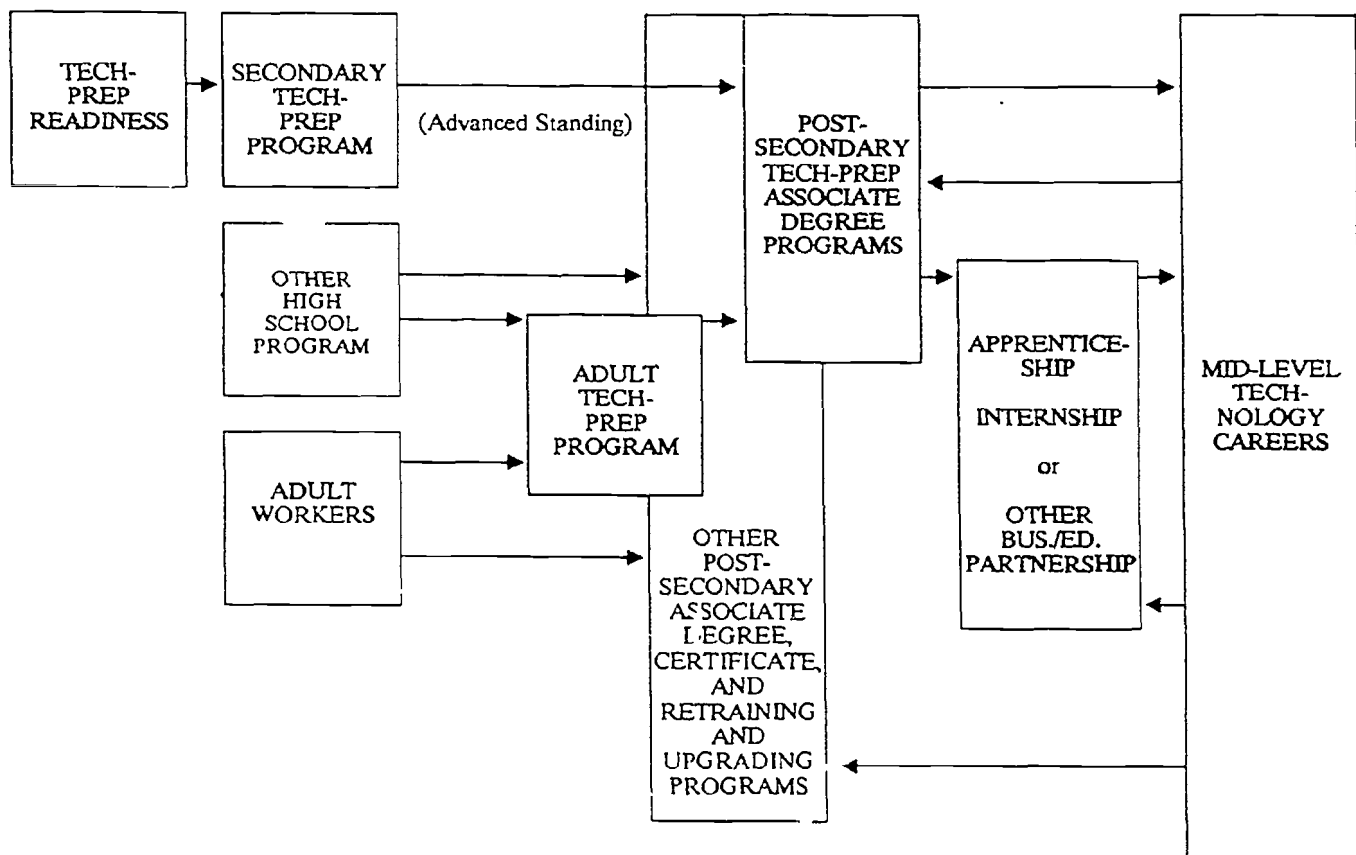


FIGURE 1

ARCHITECTURAL DRAFTING AND DESIGN

Omaha Public Schools and METRO Community College
2 + 2 Tech Prep Associate Degree Program

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DRAFT

A 2 + 2 Tech Prep Associate Degree Program is a continuous succession of courses for grades 9-14. The associate degree is typically earned by completing 2 years of designated college courses after graduating from high school. By participating in the 2 + 2 Tech Prep Program, the student is not only certain to have met all of METRO Community College's prerequisites, but may also be able to earn some of the associate degree credits while still in high school.

Advanced Credits

High school courses which may be taken to earn advanced credits for an associate degree at METRO Community College are shown on the suggested course schedule (other side) in **bold type**. College courses which may be satisfied by high school courses are also in **bold type**. High school students should consult with their vocational teacher or counselor to find out how they can earn advanced credits. There is no cost at METRO Community College for advanced credits earned.

Required Courses

Courses required of all students in order to meet OPS graduation requirements and to qualify for the Architectural Drafting and Design 2 + 2 Tech Prep program.

Elective/Recommended Courses

Elective high school courses for this 2 + 2 Tech Prep Program are recommended to provide the students with the best technical preparation for the given associate degree program.

Mathematics

The Architectural Drafting and Design Program at METRO Community College requires a solid math background and understanding. A student pursuing this program should successfully complete a minimum of Algebra 1&2 and Geometry 1&2 in high school. However, it is recommended that Algebra 3&4 be part of the high school program.

Program Flexibility

Flexibility and individual choice is guaranteed and easy to obtain with the 2 + 2 Tech Prep Associate Degree Program. For many programs there are four possible levels which will leave the student with some entry-level job skills and credentials: 1) grade 12 - high school diploma; 2) grade 13 - Certificate of Achievement; 3) grade 14 - Associate Degree; and 4) Transfer to a four-year college.

ARCHITECTURAL DRAFTING AND DESIGN

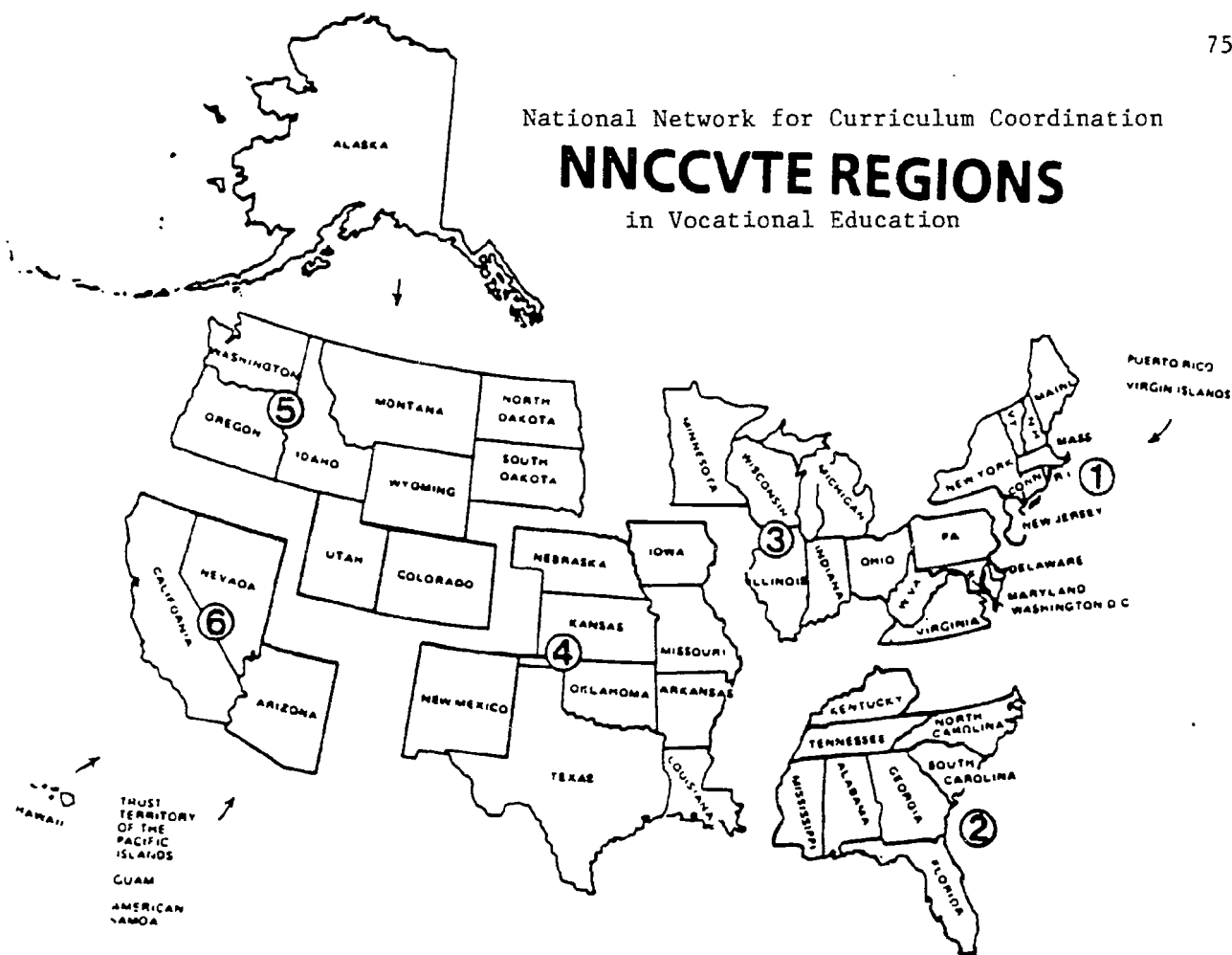
This two-year Associate Degree Program in Architectural Drafting and Design provides basic coursework in drafting and computer-aided design for the construction industry. The objective is to educate technicians to work with architects, designers, civil engineers, contractors, individual skilled crafts and building materials suppliers as architectural drafters.

APPENDIX C
NATIONAL CURRICULUM CENTERS
and
STATE CONTACTS FOR TECH PREP PROGRAM

National Network for Curriculum Coordination

NNCCVTE REGIONS

in Vocational Education



1
Northeast Curriculum
Coordination Center
 Martha Poci, Director
 New Jersey Dept. of Education
 Division of Voc Ed
 Crest Way
 Aberdeen, NJ 07747
 201/290-1900

2
Southeast Curriculum
Coordination Center
 Rebecca Love Wilkes, Director
 Research & Curriculum Unit
 P.O. Drawer DX
 Mississippi State, MS 39762
 601/325-2510

3
East Central Curriculum
Coordination Center
 Rebecca Douglass, Director
 Sangamon State University, F-2
 Springfield, IL 62794-9243
 217/786-6375

4
Midwest Curriculum
Coordination Center
 Richard Makin, Director
 Dept. of Vocational and
 Technical Education
 1500 W. 7th Ave.
 Stillwater, OK 74074-4364
 405/377-2000

5
Northwest Curriculum
Coordination Center
 Bill Daniels, Director
 Old Main -- Room 478
 Saint Martin's College
 Lacey, WA 98503
 206/438-4456

6
Western Curriculum
Coordination Center
 Lawrence F.H. Zane, Director
 University of Hawaii
 College of Education
 1776 University Ave., Wist 216
 Honolulu, HI 96822
 808/948-7834

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APPENDIX D
NATIONAL NETWORK FOR CURRICULUM COORDINATION
in
VOCATIONAL AND TECHNICAL EDUCATION INFORMATION
(NNCCVTE)

Where To Go For Tech Prep Resources?

The

= NNCCVTE Tech Prep Clearinghouse =

The National Network for Curriculum Coordination in Vocational And Technical Education (NNCCVTE) in coordination with the National Center for Research in Vocational Education is collecting curricular resources for Tech Prep implementation.

Presenters and participants in CORD's Tech Prep workshops are asked to submit requests of material resources and resources they have developed to the Clearinghouse. They will then be available through the NNCCVTE.

For additional information or to submit materials

Contact:

Dr. Rebecca Douglass, Director

NNCCVTE, East Central Region

Sangamon State University

Springfield IL 62794-9243

(217) 786-6375

**NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION
(NCRVE)**

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